

PUBLIC OPINION STUDY

FOR

PROJECT SWEEP

**- Survey of Parents of Students at
Cypress, Millington, and Woodstock -**

Prepared for:

Project SWEEP

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Background and Objectives

Now completing an Extended Session after a successful debut in the 2002-2003 school year, Project SWEEP is a comprehensive program coordinated by Shelby County Schools that is designed to increase public awareness and knowledge about storm water pollution issues, and to provide the skills to make informed decisions and take responsible actions.

One aspect of Project SWEEP in this Extended Session involved measuring awareness of various storm water pollution issues among parents of students at Cypress, Millington, and Woodstock, the three schools participating in the Extended Session of SWEEP; this was accomplished by the parents completing a survey questionnaire on the subject of storm water pollution.

Specific questions to be answered by this study include:

- How many respondents are aware of the definition of storm water?
- How many respondents think there is a problem with storm water pollution in Memphis?
- Do respondents believe that storm water goes through a cleaning process before reaching the Mississippi River?
- How interested are respondents in learning more about storm water pollution?
- How do respondents usually dispose of their used automobile oil?
- What other comments did respondents pass along about the subjects of storm water and storm water pollution?

Methodology

- Survey forms were distributed to parents of students at Cypress, Millington, and Woodstock on November 11, 2003. By the cutoff date of November 14, 2003, a total of 290 completed surveys were returned, divided as follows by school:
 - Cypress (105 surveys)
 - Millington (92 surveys)
 - Woodstock (93 surveys)
- A copy of the questionnaire is appended.

Summary of Findings/Conclusions

- 1) Want Information. In the survey question that specifically measured interest in learning more about the issue of storm water pollution, as well as in the concluding written comments, it is quite apparent that while some of the 290 parents who completed this survey currently have knowledge about the causes of storm water pollution, a large majority of those surveyed would like to have more information about storm water pollution and its causes.

In the specific survey question measuring interest in learning more about the issue of storm water pollution, 82% of respondents said they are either Very Interested or Somewhat Interested in learning more about storm water pollution. And then, when asked to pass along any comments about storm water pollution, interest in receiving information about storm water pollution and learning more about the subject was one of the leading comments submitted.

The above-mentioned survey results would seem to suggest that any future efforts to educate the public about storm water pollution would be quite well-received.

- 2) Other People. Not only did the respondents themselves express an interest in learning more about storm water pollution, we also noted a few comments about actions respondents have noticed being taken by others that have resulted in storm water pollution.

If, through educational or marketing efforts, those in the public who currently have knowledge about the causes of storm water pollution can be persuaded to inform others of actions they are taking that cause storm water pollution, the incidence of storm water pollution in the general population surely would be reduced over the long-term.

3) Want Information, But Have Knowledge. While it's true, as we discussed on the previous page, that many respondents in this survey want more information about storm water pollution, results to specific survey questions indicate that some of these same respondents currently possess a fair amount of knowledge about storm water pollution:

- 68% of survey participants said they were aware of the definition of storm water provided to them.
- Only 18% of respondents incorrectly said that storm water goes through a cleaning process before reaching the Mississippi River.
- 61% of those surveyed said they take their used automobile oil to a recycling center.

In addition, at least some degree of respondent knowledge was also reflected in the 82% level of being Very Interested or Somewhat Interested in learning more about storm water pollution that was referred to on the previous page, as well as by the fact that over one-half of those surveyed think Memphis has a problem with storm water pollution.

A reading of the terms and words used in respondents' specific written comments at the end of this report provides another indication of respondents knowing a good deal about the subjects of storm water and storm water pollution.

Therefore, combining the knowledge about storm water pollution on the part of many respondents in this survey with the expressed interest in learning more about the subject would certainly seem to indicate a receptiveness to any future educational programs on the subjects of storm water and storm water pollution.

4) Cypress. Of the three schools participating in this survey, results from the parents at Cypress differed noticeably from results at Millington and Woodstock. Cypress respondents were less likely to say they were aware of the definition of storm water, more likely to incorrectly say that storm water goes through a cleaning process before reaching the Mississippi River, and less likely to take their used oil to a recycling center.

On the other hand, when it came to expressing their level of interest in learning more about the issue of storm water pollution, survey participants from Cypress were considerably more likely than those from Millington or Woodstock to say they are Very Interested in learning more.

We don't want to make too much of the results by school, but because the Millington and Woodstock results were quite similar on the four survey questions (out of the five in total) on which Cypress differed, and because, as the previous paragraph indicated, Cypress respondents were so interested in learning more about storm water pollution, we feel the parents surveyed at Cypress may, through their responses in this survey, be communicating the fact that the area in which they live is experiencing issues related to storm water pollution that call for more education on the subject, as well as correcting any storm water pollution issues that currently exist in the Cypress area.

DETAILED FINDINGS

How Many Respondents Said They Were Aware Of The Definition Of Storm Water Provided To Them?

- Total Sample & By School -

- In the first survey question, respondents were presented with the definition of storm water -- the runoff from rain and melted snow that flows into the city's storm drain system -- and asked whether they were aware of the definition.

Total Sample

- Slightly more than two-thirds of all survey participants, 68%, said they are **Aware of the definition of storm water**.

By School

- Respondents from Millington (74%) and Woodstock (71%) were a little more likely to report being **Aware of the definition of storm water** than were those at Cypress (59%).

	<u>Total</u> (290)	<u>Cypress</u> (105)	<u>School</u> <u>Millington</u> (92)	<u>Woodstock</u> (93)
<u>Aware Of Definition Of Storm Water?</u>				
Yes, Aware of definition	68%	59%	74%	71%
No, Not aware of definition	32	41	26	29

How Many Respondents Think Memphis Has A Problem With Storm Water Pollution?

- Total Sample & By School -

- After being informed that storm water pollution occurs when items get into the storm water, survey participants were asked if they think Memphis has a problem with storm water pollution.

Total Sample

- While not by a large margin, a majority of the total sample was of the opinion that **Memphis has a problem with storm water pollution** (56%).
- Of the remaining respondents, a few, 11%, believe Memphis **Does not have a problem with storm water pollution**, while one-third, 33%, **Don't know if Memphis has a problem with storm water pollution**.

By School

- Woodstock respondents were below average in saying **Memphis has a problem with storm water pollution** (43%, vs. 63% at Cypress, and 62% at Millington).

	<u>Total</u> (290)	<u>Cypress</u> (105)	<u>School</u> <u>Millington</u> (92)	<u>Woodstock</u> (93)
<u>Think Memphis Has Problem With Storm Water Pollution?</u>				
Yes, Has a problem	56%	63%	62%	43%
Does not have a problem	11	9	8	16
Don't know	33	28	30	41

Do Respondents Believe Storm Water Goes Through A Cleaning Process Before Reaching The Mississippi River?

Total Sample

- Not many respondents in total, 18%, believe storm water **Does go through a cleaning process before reaching the Mississippi River.**
- Over one-half of all survey participants said storm water **Does not go through a cleaning process before reaching the Mississippi River** (56%), with one-quarter saying they **Don't know if storm water goes through a cleaning process before reaching the Mississippi River** (26%).

By School

- The one-quarter of Cypress respondents, 25%, who believe storm water **Does go through a cleaning process before reaching the Mississippi River** was slightly higher than the 16% of Woodstock respondents and 13% of Millington respondents holding this opinion.

	<u>Total</u> (290)	<u>Cypress</u> (105)	<u>School</u> <u>Millington</u> (92)	<u>Woodstock</u> (93)
Does Storm Water Go Through <u>A Cleaning Process?</u>				
Yes, Does go through a cleaning process	18%	25%	13%	16%
Does not go through a cleaning process	56	46	66	55
Don't know	26	29	21	29

How Interested Are Respondents In Learning More About Storm Water Pollution?

Total Sample

- Across all three schools, more than eight in ten survey participants said they are **Very Interested** (26%) or **Somewhat Interested** (56%) in learning more about storm water pollution. While this combined 82% **Very Interested/Somewhat Interested** score is certainly impressive, it might be hoped that the "Very Interested" percentage would be higher relative to the "Somewhat Interested" percentage.

By School

- Survey respondents from Cypress were two times more likely than those from Millington and Woodstock to be **Very Interested** in learning more about the issue of storm water pollution (44%, vs. 20% at Woodstock, 14% at Millington).
- However, when the **Very Interested** and **Somewhat Interested** scores are added together, the 85% of Cypress respondents **Very Interested/Somewhat Interested** in learning more about storm water pollution was actually two points below the 87% level at Woodstock, and not too much higher than the respectable 74% score at Millington.

	<u>Total</u> (290)	<u>Cypress</u> (105)	<u>School</u> <u>Millington</u> (92)	<u>Woodstock</u> (93)
Interest In Learning More About <u>Storm Water Pollution</u>				
Very Interested	26%	44%	14%	20%
Somewhat Interested	56	41	60	67
Not Interested	18	15	26	13

How Do Respondents Dispose Of Their Used Automobile Oil?

- In the final survey question, survey participants were asked how they usually dispose of their used automobile oil.

Total Sample

- Sixty-one percent (61%) of all respondents indicated that **Taking used oil to a recycling center** is their usual method of disposing used oil after changing the oil in their car.
- Though a distant second as a disposal method for used oil, 25% of those surveyed did say they **Put used oil in the trash**.

By School

- Millington and Woodstock respondents were quite similar in how they dispose of used oil, with 77% at Millington and 75% at Woodstock **Taking used oil to a recycling center**, and just over 15% **Putting used oil in the trash** (17% Millington, 16% Woodstock).
- However, by marked contrast, Cypress survey participants were actually slightly more likely to say they dispose of used oil by **Putting it in the trash** (39%, vs. 17% at Millington, and 16% at Woodstock) rather than **Taking it to a recycling center** (34%, vs. 77% at Millington, 75% at Woodstock). In addition, Cypress respondents were also clearly the most likely to say they **Pour used oil in the street** (26%, vs. 7% of those at Woodstock, 3% of those at Millington).

	<u>Total</u> (290)	<u>Cypress</u> (105)	<u>School</u> <u>Millington</u> (92)	<u>Woodstock</u> (93)
<u>How Dispose Of Used Oil</u>				
Take to a recycling center	61%	34%	77%	75%
Put in the trash	25	39	17	16
Pour in the street	12	26	3	7
No answer	2	1	3	2

Respondent Comments

- Following the five survey questions, respondents were given the opportunity to pass along written comments about the subjects of storm water and storm water pollution; these comments are shown, by school, on the next two pages.

Summary of Comments

- On an encouraging note, several respondents' comments indicated they were interested in learning more about the subjects of storm water and storm water pollution, and considered it important that they learn more about these subjects; such interest should serve to confirm the result we saw on page 9 in which 82% of the survey sample said they are Very Interested or Somewhat Interested in learning more about the issue of storm water pollution. At least a few people specifically said they wanted to obtain or receive more information about the subjects of storm water and storm water pollution. And, as you will see in reading the specific comments on the next two pages, several respondents already possess specific knowledge about the causes of storm water pollution.
- In addition to wanting to learn more about storm water and storm water pollution themselves, a few respondents were of the opinion that others in the community could become more educated on the subjects of storm water and storm water pollution.
- The general issue of storm water pollution's effect on the water system was another topic of interest contained in several survey participants' written comments; in at least a couple of cases, concerns were expressed about storm water pollution having an adverse effect on Memphis' drinking water.
- Beyond the water system itself, a few respondents commented on the impact of storm water pollution on the environment as a whole.

(please see lists on the next two pages)

Respondent Comments

Cypress

- If they fix the streets properly so the water would drain right, we wouldn't have a problem.
- I really don't think storm water is being cleaned.
- I think it's bad. It floods things. People could drown.
- Does storm water come from floods or is it in the sewer? Is storm water a good source of nature? How does storm water effect Memphis, Tennessee? Can storm water get into the water we drink?
- Do not pollute the storm drains.
- Storm water pollution is bad because when people don't try to clean up our environment it just causes more pollution in the area.
- Most of us in Memphis are not very aware of storm water pollution, so I think we need to be more aware of storm water pollution; keep a look out and clean up.
- Storm water destroys everything in my area; trees fall, there are floods, and people can't drive in all that water.
- Something should be done because we have to drink the water.
- I want to know if the water gets cleaned before it reaches the Mississippi River. I want to know if Memphis water is clean.
- Do we drink storm water?

Millington

- I think drinking water tests should be on the evening news and mailed to consumers.
- I am aware of this problem. More people need to be informed.
- Controlling pollution in general is very important in our society. Pollution from rain water and contaminants are susceptible to entering our rivers and oceans; as a result, this can be detrimental to the human society.
- Cars that leak oil or anti-freeze on the streets also pollute the storm water.
- City and County maintenance should spend a little more time making sure the storm drains stay clean to flow properly.
- I am concerned about storm water pollution now that the issue has been raised; in the past I never thought about it.
- Not interested; let civil engineers worry about it.
- A city will have more runoff pollution than any other type of community, and Memphis is a dirty city. In the spring and fall, cities have more runoff water than they can deal with; this will eventually end up in the Mississippi River.
- By the looks of the Mississippi River it doesn't look like any of the water has been treated.
- Storm water seems to be a very big problem for inner-cities.
- A great field project could be for the students to test the storm drains' water for chlorine, phosphorous, pH, etc.

Respondent Comments

Millington (continued)

- Always like to hear any new information on things like storm water or pollution.
- Sounds like an interesting topic to learn about.
- With all the chemicals and trash that goes into storm drains, oil is a small problem. Most people change oil at oil change stores and retailers like Wal-Mart.

Woodstock

- Is storm water a must for the recycling process?
- The pollution goes into Wolf River, then goes into the Mississippi River. The storm water should go through a cleaning process because if it does not then the oceans, seas, rivers, ponds, and lakes would be nasty.
- There are no storm water drains in the Shelby Forest area where we live.
- People should properly discard trash of any kind.
- I know the process of water purification in Memphis. I also know that a lot of people are not educated about our water and sewer system and do abuse drainage runoffs.
- We aren't the best or worst city.
- We need to know more information concerning water pollution.
- More information needs to be put out on the subject.
- I think that it is a very good idea to ask people what they think about water pollution.
- Trash thrown in the street usually ends up in storm drains and then in the river.

Appendix

STORM WATER SURVEY

Please circle your answer on the following questions. Thank you for your help.

1. Storm water is the runoff from rain and melted snow that flows into the city's storm drain system. Were you aware of this?

YES

NO

2. Storm water pollution occurs when items get into the storm water. Do you think Memphis has a problem with storm water pollution?

YES

NO

DON'T KNOW

3. Do you believe storm water goes through a cleaning process before reaching the Mississippi River?

YES

NO

DON'T KNOW

4. How interested are you in learning more about the issue of storm water pollution?

VERY
INTERESTED

SOMEWHAT
INTERESTED

NOT
INTERESTED

5. If you change the oil in your car yourself, or if someone changes your oil for you, how is the used oil usually disposed?

POUR IN
THE STREET

TAKE TO A
RECYCLING CENTER

PUT IN
THE TRASH

Please use the space below to pass along any comments about the subjects of storm water and storm water pollution.

